

# State of Delaware Migration, Risk, Cost and Utilization for Employee Health Plans

FY17 and FY18 (YTD)<sup>1</sup>

May 2018



# Background

- The SEBC requested a deep dive into GHIP utilization driving favorable plan experience in FY18 Q1-Q2
  - \$29.9M net income generated by the Fund over this period (July 2017 through December 2017)
  - Highmark medical claims \$2.7M over budget, Aetna medical claims \$23.8M below budget
    - Fund claim totals reflect claims on a “paid” basis, including run-out for the terminated Highmark HMO and CDH plans, while budget is calculated on an “incurred” basis
    - In addition, plans are not priced by relative value, therefore comparing actual to budgeted claims for individual plans/vendors is not a true indication of plan performance
- New care management programs (CCMU and AIM) are likely contributing to favorable experience for both vendors; programs require longer runway to measure overall impact
- This report summarizes relative risk scores, incurred costs PMPM, and utilization patterns year over year by plan for the active and pre-65 retiree population, as well as key cohorts of employees migrating from terminated Highmark plans into new plans for FY18
- Report summarizes data through 12/31/2017; additional analysis to be performed when data through FY18 Q3 is available beginning in August

## Key findings

- Overall, incurred claims per member per month remained flat in FY18 Q1-Q2 compared to full year FY17
- Highmark PPO plan participants have higher relative risk scores (174) than Aetna HMO (149) and CDH (119) plan participants
  - The risk scores for Aetna HMO and CDH decreased in FY18, while the risk scores for Highmark PPO and FSB increased or stayed the same, suggesting that the higher risk participants in Highmark HMO and Highmark CDH remained with Highmark
  - FY17 average cost PMPM was significantly lower for Highmark HMO and CDH participants migrating to the Aetna HMO plan compared to the Highmark PPO plan
    - Participants migrating from the Highmark HMO to the Aetna HMO had a \$329 average PMPM in FY17, while those migrating from the Highmark HMO to the PPO had a \$504 average PMPM
  - The Highmark PPO plan experienced a 3.8% increase in ER visits from FY17, while all other plans decreased or remained flat
- Net medical payments PMPM decreased 11% for members moving from the Highmark HMO to the Aetna HMO (driven by a decrease in utilization), while payments generally increased for other GHIP cohorts
  - Reduction in utilization for HMO members moving from Highmark to Aetna potentially driven by members learning to navigate the new plan and establishing relationship with PCP's
    - The Highmark HMO was an open-access plan, while the Aetna HMO is a gatekeeper plan, requiring members to register a PCP and receive referrals for specialty care
  - Key utilization for population moving from Highmark HMO to Aetna HMO detailed on next page
- Overall GHIP population risk is 62% above benchmark average
  - The SEBC must continue to monitor plan experience and implement strategies to mitigate trend

# Key findings

## Overall utilization trends

- The tables below compare key utilization metrics for the first half of FY18 (July 2017 – December 2017) with the first half of FY17 (July 2016 – December 2016) (data can be found on pages 12-13)

per 1,000 members	HMO	CDH	FSB	PPO
	Aetna	Aetna	Highmark	Highmark
<b>Inpatient Admits</b>	▼ 7.8%	▼ 37.9%	▼ 19.0%	▼ 6.7%
<b>ER Visits</b>	▲ 0.8%	▼ 11.1%	▼ 4.9%	▲ 3.8%
<b>Office Visits</b>	▼ 2.0%	▲ 2.7%	▲ 9.7%	▼ 2.7%
<b>Adult Preventive</b>	▲ 1.3%	▼ 4.7%	▲ 20.8%	▼ 1.1%

Aetna HMO	Members from Highmark HMO	Members from Highmark CDH	Members from All Other Plans
per 1,000 members			
<b>Admits</b>	▼ 30.9%	▼ 5.5%	▲ 28.0%
<b>ER Visits</b>	▲ 8.5%	▼ 44.4%	▲ 2.8%
<b>Office Visits</b>	▼ 9.9%	▼ 14.3%	▼ 1.8%
<b>Adult Preventive</b>	▲ 10.0%	▼ 8.1%	▲ 3.7%

- Reduction in net medical payments PMPM for members moving from the Highmark HMO to the Aetna HMO driven by a 30.9% decrease in acute inpatient admits and a 9.9% decrease in office visits (15.1% decrease for the top 15 specialists)

**Population** – Includes active employees, early retirees (non-Medicare) and their spouses and dependents.

**Relative Risk (RR)** – The Relative Risk Score assigned to an individual indicates the expected relative cost risk of a individual during the report time period compared to the average, expressed on a scale of 100. The average (100) represents the average for the nationwide dataset on which the model was developed. This score is produced by DCG models.

### **Risk Categories**

**Healthy** - represents nearly 50% of the privately insured under-65 U.S. population, who account for less than 5% of total healthcare cost. Most patients in this category are infrequent or non-utilizers of the healthcare system, most often being treated for occasional low severity acute conditions

**Stable** - represents nearly 25% of the privately insured under-65 U.S. Population who account for 10-15% of total healthcare cost. Most patients in this category are somewhat active utilizers of the healthcare system, most often being treated for low-severity acute conditions.

**At Risk** - represents between 15 and 20% of the privately insured under-65 U.S. population, who account for 20-25% of total healthcare cost. Most patients in this category are active utilizers of the healthcare system, most often being treated for multiple medium-severity acute conditions and/or low-severity chronic conditions.

**Struggling**- represents between 5 and 10% of the privately insured under-65 U.S. population, who account for 25-30% of total healthcare cost. Most patients in this category are heavy utilizers of the healthcare system, most often being treated for multiple high-severity acute conditions and/or medium-severity chronic conditions.

**In Crisis** - represents the top 2% of the privately insured under-65 U.S. population, who account for approximately 30% of total healthcare cost. Most patients in this category are heavy utilizers of the healthcare system, most often being treated for multiple severe acute and/or chronic conditions.

### **Time Period Comparisons**

In this report, medical net payments on per member per month basis are used for comparison. For cost, the full 12 month experience of FY17 (July 2016 – June 2017) is included and compared to the first six months (July 2017 – December 17) of FY18. Visits per 1000 and admissions per 1000 are used for comparison of health services utilization. For utilization, the first six months of FY17 (July 2016 – December 2016) is compared to the first six months of FY18 (July 2017 – December 2017).

**IBNR** – Adjusts for claims that incurred but not reported.

# What plans did the former members of HighMark HMO and HighMark CDHP enroll in at the start of FY18 and what were the relative risks (RR) of these cohorts?

Of the 32,408 members enrolled in HighMark HMO (RR 154) in June 2017:

- 20,186 (62.3%, RR 138) enrolled in Aetna HMO;
- 677 (2.1%, RR 115) enrolled in Aetna CDHP;
- 1,428 (4.4%, RR 134) enrolled in HighMark First State Basic;
- 9,167 (28.3%, RR 174) enrolled in HighMark PPO;
- 52 (<1% enrolled in Medicfill); and
- 898 (2.8%) were not enrolled in any State of Delaware plan.

Of the 3,391 members enrolled in HighMark CDHP (RR 117) in June 2017:

- 157 (4.6%, RR 93) enrolled in Aetna HMO;
- 2,437 (71.9%, RR 104) enrolled in Aetna CDHP;
- 264 (7.8%, RR 117) enrolled in HighMark First State Basic;
- 464 (13.7%, RR 150) enroll in HighMark PPO; and
- 69 (2.0%) were not enrolled in any State of Delaware Plan.

Of the HighMark HMO population in June 2017:

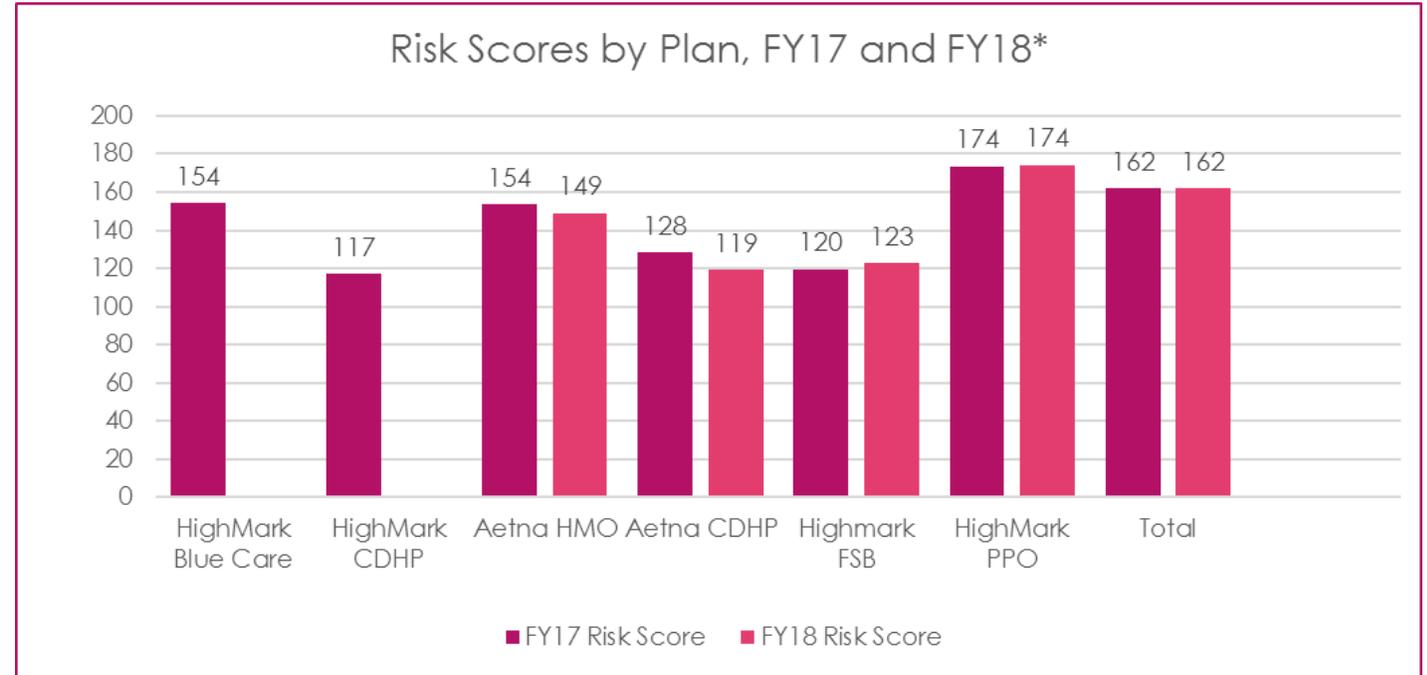
- Most members moved to Aetna HMO in July 2017. This group was at lower relative risk than the whole HighMark HMO Population.
- The second largest movement was to HighMark PPO. This group was at greater relative risk than the whole HighMark HMO Population.

Of the HighMark CDHP population in June 2017:

- Most members moved to Aetna CDHP in July 2017. This group was at lower relative risk than the whole HighMark CDHP population.
- The second largest movement was to Highmark PPO. This group was at greater relative risk than the whole Highmark CDHP population.

What were the average relative risk scores for the plans in FY17?

What were the average relative risk scores for the plans in the first half of FY18?



\*Based on FY17 Concurrent Relative Risk Score

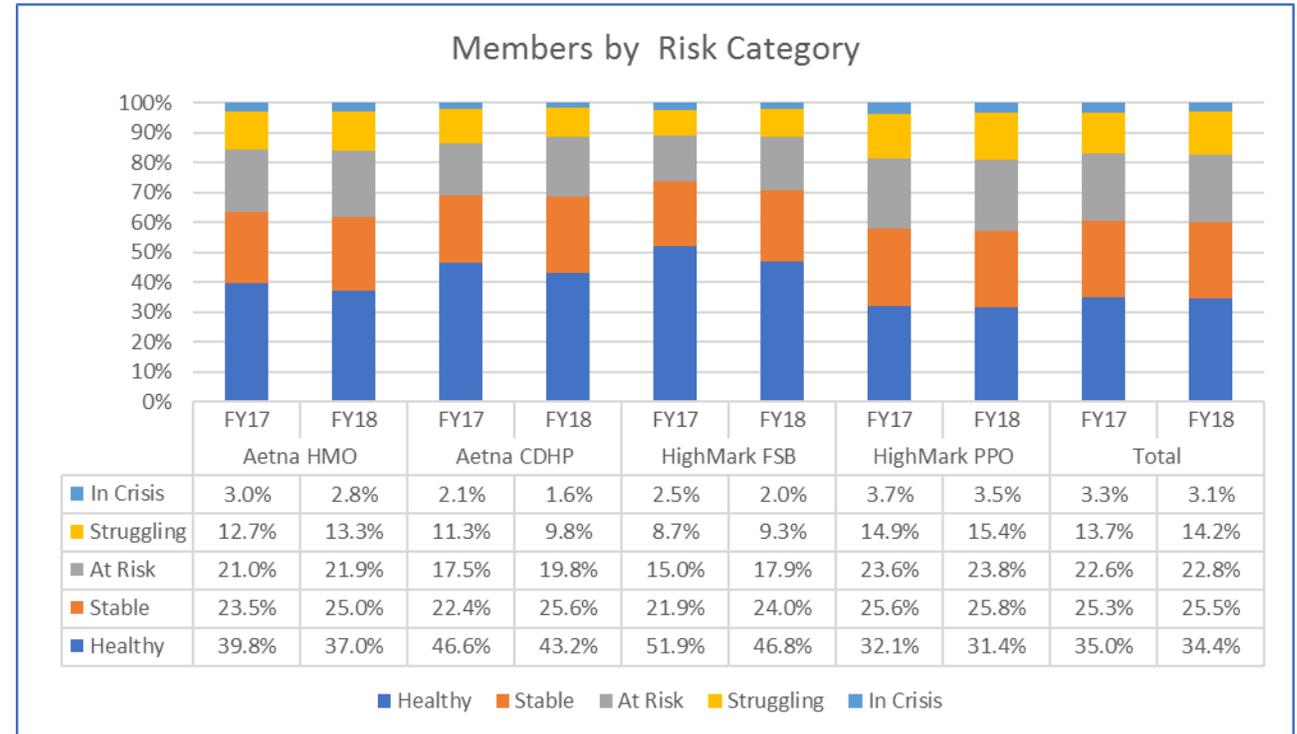
- Relative risk decreased in the Aetna HMO plan and the Aetna CDHP plan and increased slightly in the HighMark First State Basic plan. Relative risk remained stable in the HighMark PPO plan.

# How did the distribution of members with respect to risk categorization by plan change from FY17 to FY18?

To better understand the changes in the relative risk scores by plan reported on slide 4, the plans' populations can be classified by risk category. Notable changes include:

- A decrease in the proportion of those members in-crisis (typically heavy utilizers with multiple severe chronic and/or acute conditions) contributed to a decrease in the relative risk score in the Aetna HMO population.
- Decreases in the proportions of those members who were struggling (typically heavy utilizers with multiple high severity acute conditions or multiple medium severity chronic conditions) or in-crisis contributed to an overall decrease in the Aetna CDHP plan's relative risk score.
- An increase in the proportion of those members in the struggling category, combined with a decrease in those members in the healthy category (typically non-frequent users or non-users of health care services) contributed to an increase in the Highmark FSB plan's relative risk score.

## Member Distribution by Risk Category



# Family Plan Migration FY17 / FY18

		FY17 Plan Enrollment (Migrating From)																	
		Aetna HMO			Aetna CDHP			HighMark FSB			HighMark PPO			HighMark CDHP			HighMark HMO		
		Families	Avg. Family Size	FY17 Net Pay Med PMPM	Families	Avg. Family Size	FY17 Net Pay Med PMPM	Families	Avg. Family Size	FY17 Net Pay Med PMPM	Families	Avg. Family Size	FY17 Net Pay Med PMPM	Families	Avg. Family Size	FY17 Net Pay Med PMPM	Families	Avg. Family Size	FY17 Net Pay Med PMPM
FY 18 Plan Enrollment (Migrating To)	Aetna HMO	2,635	2.3	\$301	14	2.3	\$339	56	2.1	\$83	287	2.6	\$363	70	2.2	\$305	7,998	2.4	\$329
	Aetna CDHP	29	2.5	\$138	465	2.0	\$247	35	1.6	\$72	126	2.1	\$220	1,010	2.1	\$173	286	2.4	\$170
	HighMark FSB	14	1.8	\$202	4	2.0	\$361	849	1.8	\$260	184	2.1	\$561	108	2.2	\$184	610	2.2	\$284
	HighMark PPO	106	2.2	\$278	10	1.5	\$1000	99	1.9	\$474	20,514	2.3	\$424	234	2.1	\$477	3,985	2.4	\$504

- Just under 8,000 families migrated from Highmark HMO to Aetna HMO. These families had a higher PMPM (\$329) in FY17 than families in Aetna’s HMO (\$301).
- Just under 4,000 families migrated from HighMark HMO to HighMark PPO. These families a much higher PMPM (\$504) in FY17 than families in HighMark PPO (\$424)
- About 1,000 families migrated from HighMark CDHP to Aetna CDHP. These families had a lower PMPM (\$173) in FY17 than families in Aetna’s CDHP (\$247).

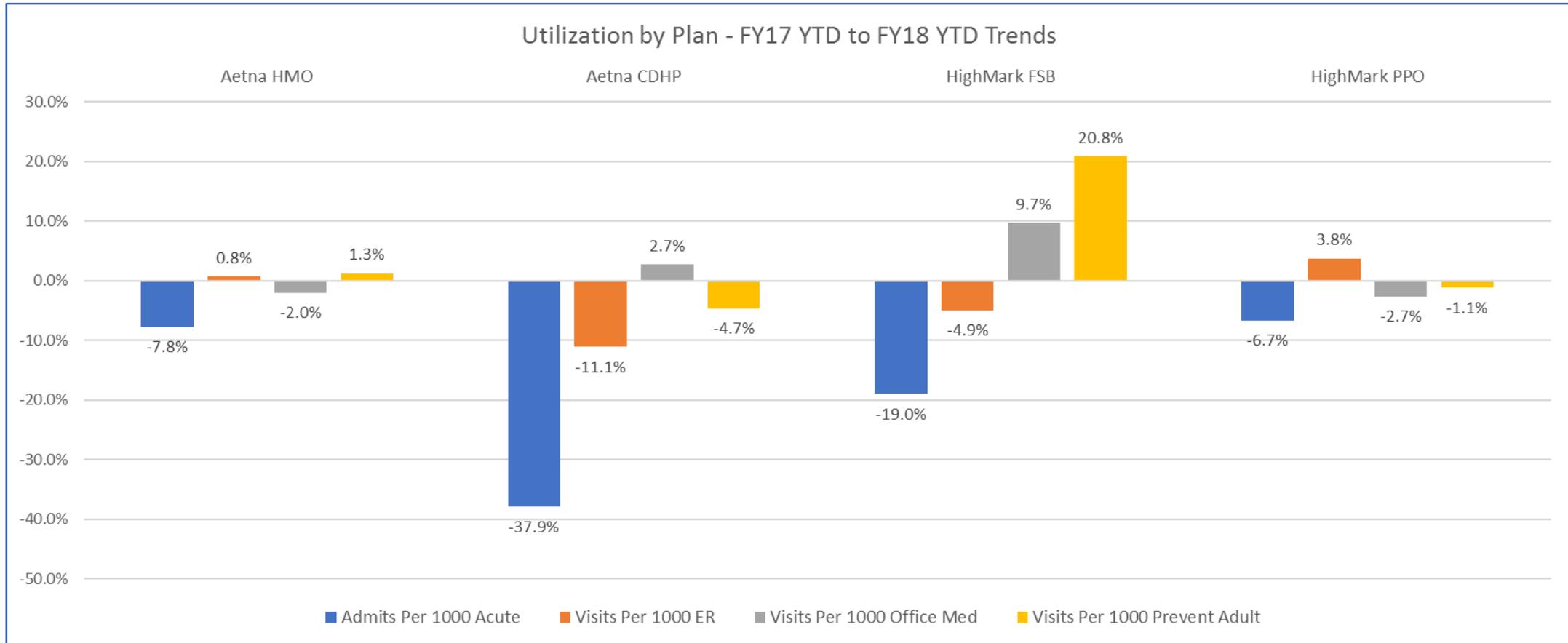
# How much did medical net payments per member change by Plan and Study Group?

	Net Pay PMPM (IBNR) All Medical Payments			Net Pay PMPM (IBNR) Inpatient Payments			Net Pay PMPM (IBNR) Outpatient Payments		
	FY17	FY18	Trend	FY17	FY18	Trend	FY17	FY18	Trend
<b>Aetna HMO (FY18 Members)</b>	\$331	\$323	-2%	\$107	\$94	-12%	\$222	\$228	3%
- From HighMark HMO (n=20,186)	\$338	\$303	-11%	\$111	\$83	-25%	\$226	\$219	-3%
- From HighMark CDHP (n=157)	\$225	\$280	25%	\$83	\$115	39%	\$141	\$165	17%
- All Others (n=9,174)	\$309	\$377	22%	\$89	\$123	39%	\$218	\$252	16%
<b>Aetna CDHP (FY18 Members)</b>	\$202	\$265	31%	\$56	\$68	21%	\$146	\$197	35%
- From HighMark HMO (n=677)	\$187	\$210	12%	\$37	\$31	-15%	\$150	\$179	19%
- From Highmark CDHP (n=2,437)	\$180	\$248	38%	\$60	\$57	-5%	\$120	\$191	60%
- All Others (n=2,112)	\$271	\$310	14%	\$70	\$96	37%	\$200	\$212	6%
<b>HighMark FSB (FY18 Members)</b>	\$304	\$302	-1%	\$100	\$108	8%	\$201	\$192	-5%
- From HighMark HMO (n=1,428)	\$313	\$233	-26%	\$93	\$83	-11%	\$217	\$149	-32%
- From HighMark CDHP (n=264)	\$178	\$263	48%	\$27	\$70	159%	\$150	\$192	28%
- All Others (n=3,320)	\$294	\$337	15%	\$128	\$122	-4%	\$165	\$213	30%
<b>HighMark PPO (FY18 Members)</b>	\$443	\$486	10%	\$138	\$148	7%	\$303	\$336	11%
- From HighMark HMO (n=9,167)	\$503	\$557	11%	\$185	\$177	-4%	\$316	\$376	19%
- From HighMark CDHP (n=464)	\$375	\$461	23%	\$131	\$109	-16%	\$243	\$351	44%
- All Others (n=53,227)	\$455	\$475	4%	\$144	\$143	-1%	\$309	\$331	7%
<b>All Members (excluding Medicfill)</b>	<b>\$402</b>	<b>\$406</b>	<b>&lt; 1%</b>	<b>\$132</b>	<b>\$121</b>	<b>-8%</b>	<b>\$269</b>	<b>\$282</b>	<b>5%</b>

## How much did medical net payments per member per month change by Plan and Study Group?

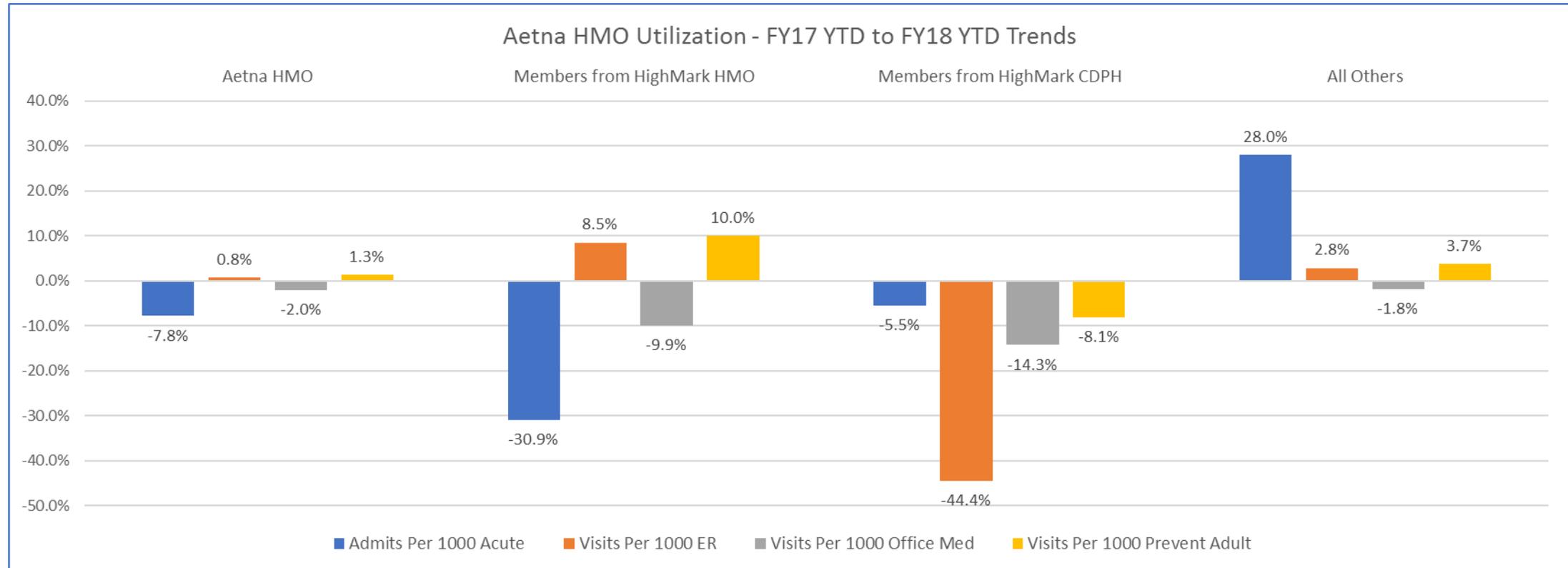
- Across all plans, the overall trend for medical payments on a per member per month (PMPM) basis increased slightly (by less than 1%) from \$402 to \$406.
- Net payments PMPM for inpatient services decreased by 8% from \$132 to \$121, while net payment PMPM for outpatient services increased by 5% from \$269 to \$282.
- By plan, trends varied:
  - Aetna HMO experienced a 2% decrease in net medical payments PMPM. The trend was mitigated by the sizeable infusion of the HighMark HMO population. Net medical payments PMPM for this population declined by 11% from \$338 to \$303. The \$303 PMPM, as well as the \$280 PMPM for members coming from the Highmark CDHP were less than the \$377 PMPM experienced by continuing members and other members from other plans migrating into Aetna HMO.
  - Aetna CDHP experienced a 31% increase in net medical payments PMPM among its members to date in FY18. Despite this increase among current members the net medical payment per member per month (\$265) remains below the PMPM for members who continued in Aetna CDHP (\$310) or migrated from plans other than the Highmark HMO or HighMark CDHP plans.
  - HighMark PPO experienced a 10% increase in net medical payments driven by members migrating from the HighMark HMO and HighMark CDH plans.

# Did changes in utilization from FY17 YTD to FY18 YTD vary by plan?



	Aetna HMO		Aetna CDHP		HighMark FSB		High Mark PPO	
	FY17	FY18	FY17	FY18	FY17	FY18	FY17	FY18
Admits per 1000	54.0	49.8	68.3	42.4	64.7	52.4	71.9	67.1
ER Visits per 1000	261.6	263.6	237.9	211.6	282.6	268.7	260.9	270.7
Office Visits per 1000	6558.0	6427.3	6724.1	6906.1	5773.6	6333.2	9419.2	9166.9
Adult Preventive Visits per 1000	463.7	469.6	500.0	476.7	331.7	400.8	490.5	484.9

# How did changes in utilization vary between former HighMark HMO & CDHP members and the overall Aetna HMO membership from FY17 YTD to FY18 YTD?



	Aetna HMO		Members from HighMark HMO		Members from HighMark CDHP		All Others	
	FY17	FY18	FY17	FY18	FY17	FY18	FY17	FY18
Admits per 1000	54.0	49.8	60.9	42.1	69.5	65.7	54.0	69.1
ER Visits per 1000	261.6	263.6	242.1	262.6	236.4	131.4	261.6	269.1
Office Visits per 1000	6558.0	6427.3	7168.8	6458.7	7327.9	6282.6	6558.3	6441.8
Adult Preventive Visits per 1000	463.7	469.6	420.4	462.4	509.0	467.8	463.7	480.9

# How did utilization of PCPs and specialists change from FY17 YTD and FY18 YTD by plan?

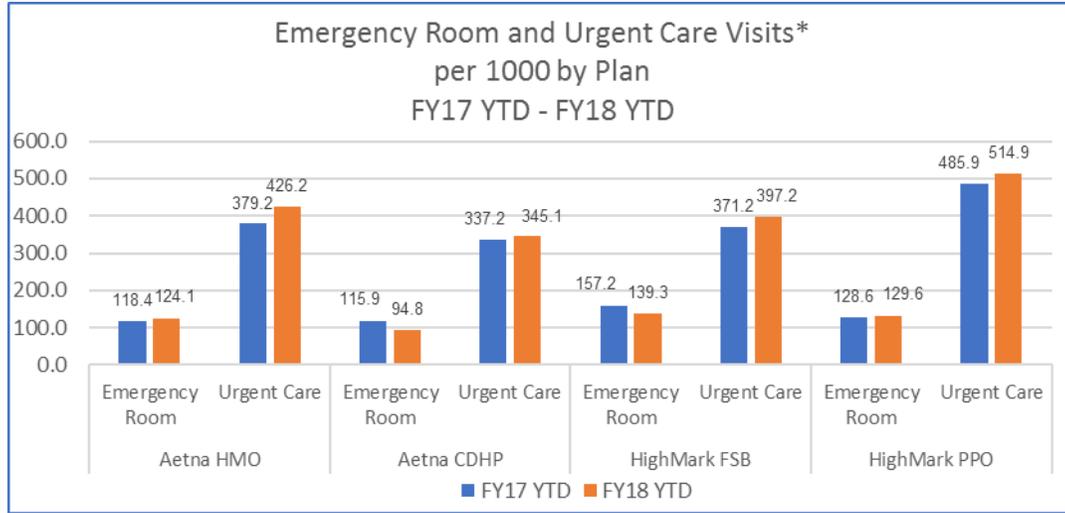
	Primary Care Providers			Top 15 Specialists <sup>1</sup>		
	Visits per 1000		Trend	Visits per 1000		Trend
	FY17 YTD	FY18 YTD		FY17 YTD	FY18 YTD	
HMO	2768.3	2710.1	-2.10%	1530.1	1538.6	0.6%
- From HighMark HMO	2746.7	2701.6	-1.64%	1,861.5	1,581.2	-15.1%
- From HighMark CDHP	2461.2	2641.8	7.34%	1,724.2	1,248.6	-27.6%
CDHP	2623.4	2417.2	-7.86%	1477.2	1443.1	-2.3%
- From HighMark HMO	2394.5	2358.8	-1.49%	1,385.0	1,488.1	7.4%
- From HighMark CDHP	2438.7	2333.8	-4.30%	1,466.7	1,443.0	-1.6%
FSB	1977.3	2216.1	12.08%	1463.8	1537.3	5.0%
- From HighMark HMO	2565.1	2484.7	-3.13%	1,790.8	1,643.2	-8.2%
- From HighMark CDHP	2605.8	2549.4	-2.16%	1,821.5	1,933.2	6.1%
PPO	2925.3	2883.5	-1.43%	2,444.2	2,451.4	0.3%
- From HighMark HMO	3057.1	2879.9	-5.80%	2,367.2	2,618.2	10.6%
- From HighMark CDHP	2941.0	2969.3	0.96%	2,454.8	2,486.1	1.3%

PCP utilization generally decreased in the first half of FY18, but did move upward in the overall HighMark FSB plan and among members from Highmark CDHP that moved to Aetna HMO.

Among the top 15 medical specialties by overall volume in FY17, utilization increased for members moving from HighMark HMO into the Aetna CDHP or HighMark PPO Plan as well as for the overall HighMark FSB plan and members moving from HighMark CDHP to the FSB plan.

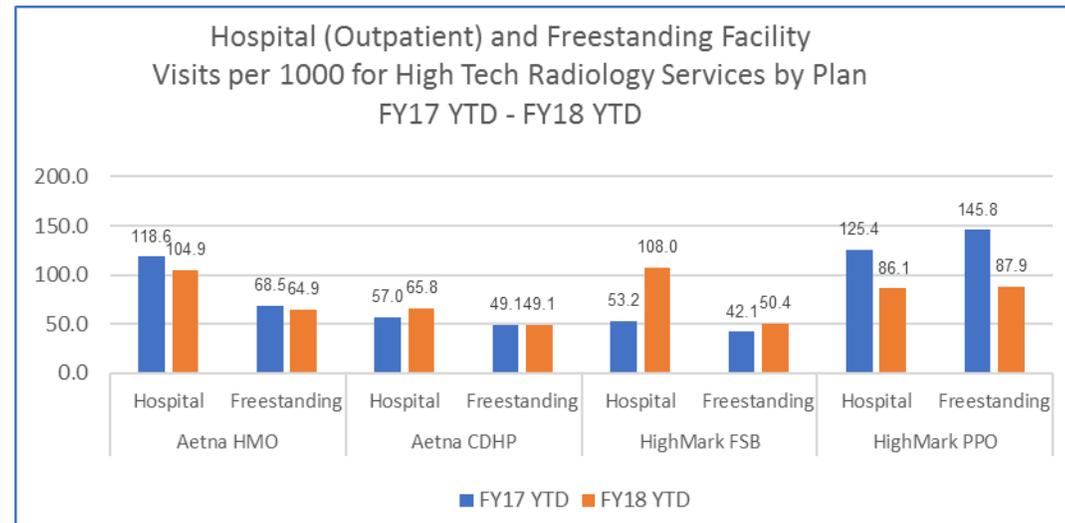
<sup>1</sup>Orthopaedic Surgery, Cardiovascular Dis/Cardiology, Dermatology, Podiatry, Urology, Ophthalmology, Otolaryngology, Gastroenterology, Surgeon (NEC); Endocrinology & Metabolism, Neurology, Physical Medicine & Rehab, Pulmonary Disease, Rheumatology, and Oncology.

# How did site of service vary by plan from FY17 YTD to FY18 YTD?



- The rate of utilization of urgent care increased among all four plans, while the change in the rate of visits to emergency rooms for similar conditions varied.

\*visits for primary care and urgent care treatable conditions



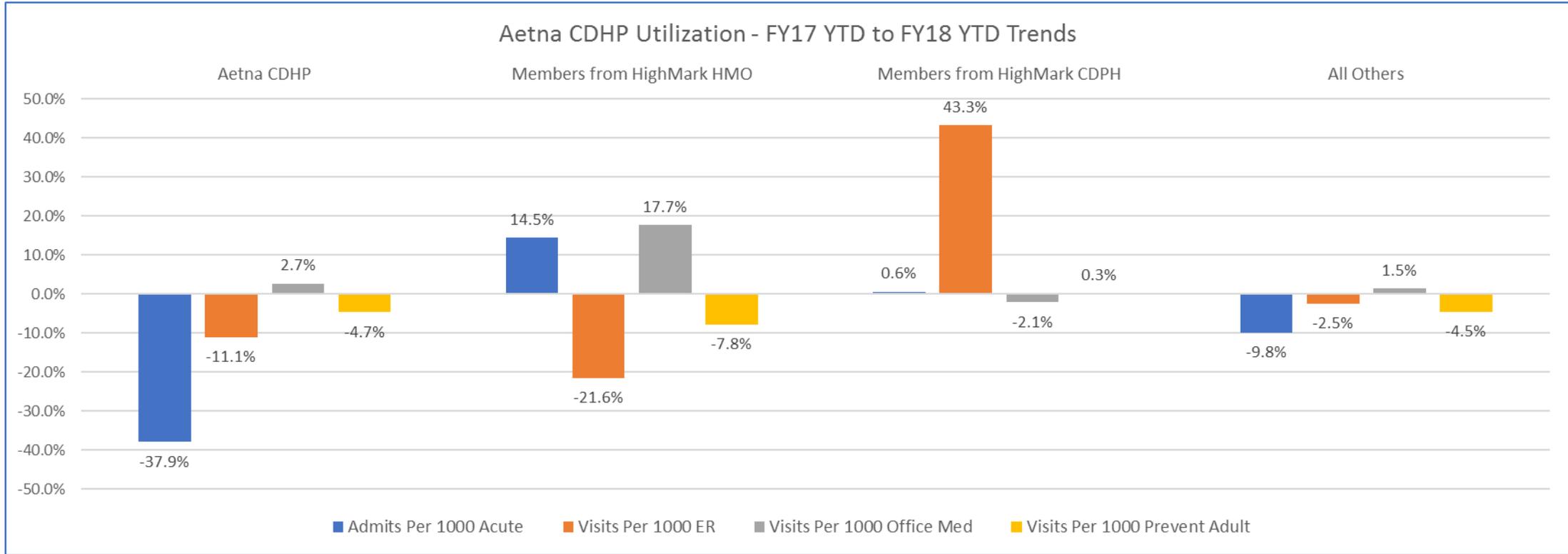
- Despite a spike in hospital utilization for the HighMark FSB plan and a smaller increase in hospital utilization in the Aetna CDHP plan, overall, utilization of high-tech imaging services declined at both hospitals and freestanding facilities.

# Appendix

# Demographic Changes by Plan

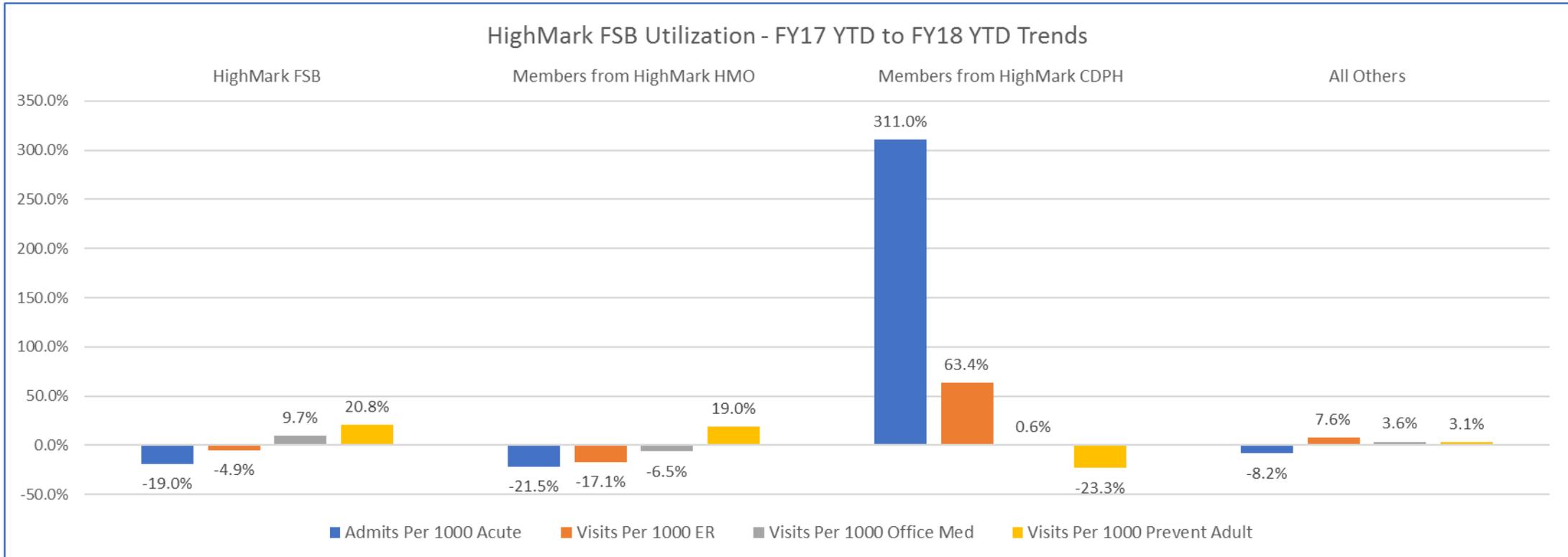
	Members			Families			Average Family Size		Average Age		% Male		Relative Risk	
	FY17	FY18	% Change	FY17	FY18	% Change	FY17	FY18	FY17	FY18	FY17	FY18	FY17	FY 18
<b>Aetna HMO</b>	6,915	28,453	312%	2,414	7,345	204%	2.3	2.3	34.3	33.3	47%	46%	154	149
<b>Aetna CDHP</b>	1,127	4,801	326%	419	1,216	190%	1.9	2.1	32.1	33.1	45%	45%	128	119
<b>First State Basic</b>	2,361	4,348	84%	913	1,574	72%	1.7	1.9	32.8	33.6	49%	47%	120	123
<b>HighMark PPO</b>	51,413	60,264	17%	21,038	24,121	15%	2.2	2.2	35.3	35.6	46%	45%	174	174

# How did changes in utilization vary between former HighMark HMO & CDHP members and the overall Aetna CDHP membership from FY17 YTD to FY18 YTD?



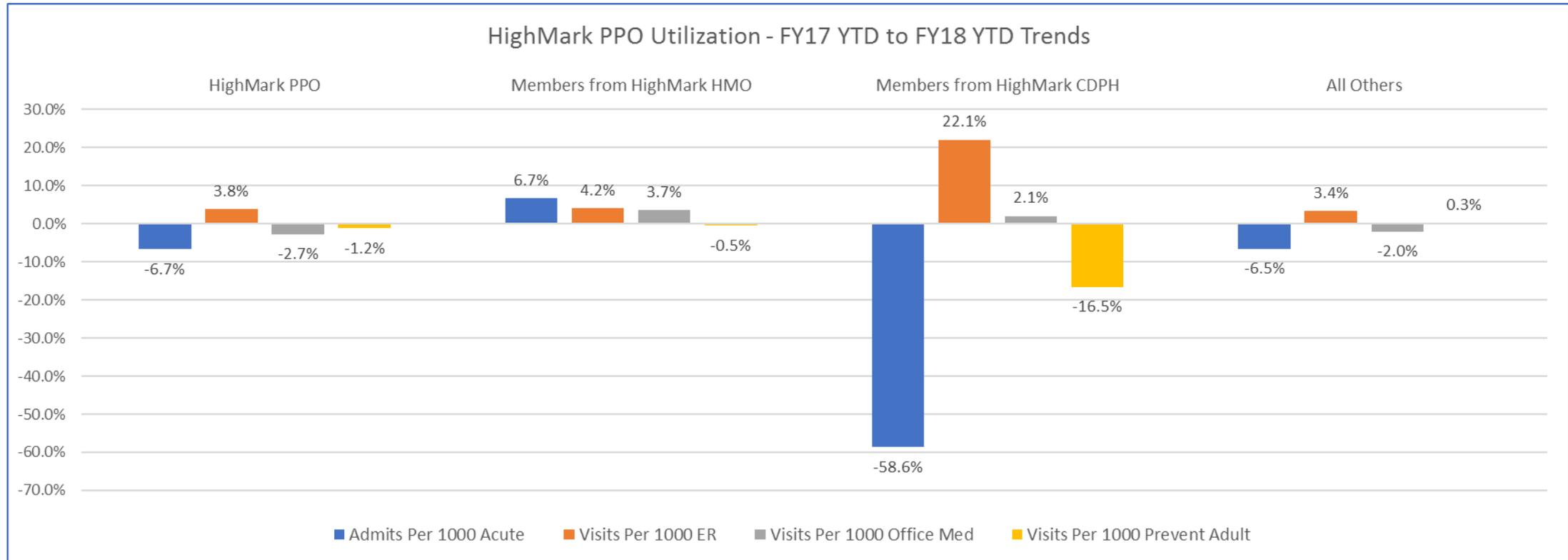
	Aetna CDHP		Members from HighMark HMO		Members from HighMark CDHP		All Others	
	FY17	FY18	FY17	FY18	FY17	FY18	FY17	FY18
Admits per 1000	68.3	42.4	33.9	38.8	27.9	28.1	68.4	61.6
ER Visits per 1000	237.9	211.6	193.9	152.1	147.9	211.9	238.2	232.3
Office Visits per 1000	6724.1	6906.1	6327.8	7446.3	6940.3	6795.5	6732.3	6829.9
Adult Preventive Visits per 1000	500.0	476.7	469.4	432.7	487.0	488.3	500.6	478.0

# How did changes in utilization vary between former HighMark HMO & CDHP members and the overall HighMark FSB membership from FY17 YTD to FY18 YTD?



	HighMark FSB		Members from HighMark HMO		Members from HighMark CDHP		All Others	
	FY17	FY18	FY17	FY18	FY17	FY18	FY17	FY18
Admits per 1000	64.7	52.4	43.6	34.2	16.9	69.3	64.7	59.5
ER Visits per 1000	282.6	268.7	237.6	196.8	160.2	261.9	282.8	304.4
Office Visits per 1000	5773.6	6333.2	6878.8	6434.3	9495.4	9550.7	5774.4	5982.7
Adult Preventive Visits per 1000	331.7	400.8	440.8	524.5	562.3	431.4	330.8	341.1

# How did changes in utilization vary between former HighMark HMO & CDHP members and the overall HighMark PPO membership from FY17 YTD to FY18 YTD?



	HighMark PPO		Members from HighMark HMO		Members from HighMark CDHP		All Others	
	FY17	FY18	FY17	FY18	FY17	FY18	FY17	FY18
Admits per 1000	71.9	67.1	63.7	67.9	85.0	35.1	71.9	67.2
ER Visits per 1000	260.9	270.7	264.8	275.8	226.6	276.7	260.9	269.8
Office Visits per 1000	9419.2	9166.9	8483.1	8795.6	8997.6	9184.5	9419.5	9233.8
Adult Preventive Visits per 1000	490.5	484.9	449.4	447.3	497.7	415.4	490.6	492.1